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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,914	02/07/2006	Jan Kristenson	HW-8023	5898
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700			EXAMINER	
			MILLER, SAMANTHA A	
CLEVEVLAND, OH 44114			ART UNIT	PAPER NUMBER
			3749	
		•		
	,		MAIL DATE	DELIVERY MODE
		·	06/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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,	Application No.	Applicant(s)			
Office Action Occurrence	10/567,914	KRISTENSON ET AL.			
Office Action Summary	Examiner	Art Unit	٦		
	Samantha A. Miller	3749			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wit	h the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by so Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re h. eriod will apply and will expire SIX (6) MONT tatute, cause the application to become ABA	ATION. ply be timely filed  THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 0	7 February 2006.				
	<del></del>				
3) Since this application is in condition for allo	owance except for formal matte	ers, prosecution as to the merits is			
closed in accordance with the practice und	ler <i>Ex parte Quayle</i> , 1935 C.D.	11, 453 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-22</u> is/are pending in the applica	tion.				
4a) Of the above claim(s) is/are with					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-22</u> is/are rejected.					
7) Claim(s) is/are objected to.	•				
8) Claim(s) are subject to restriction ar	nd/or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Exan	miner.				
10)⊠ The drawing(s) filed on <u>07 February 2006</u> is	s/are: a)⊠ accepted or b)⊡ o	bjected to by the Examiner.			
Applicant may not request that any objection to	the drawing(s) be held in abeyand	ce. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the co	· · · · · · · · · · · · · · · · · · ·	•			
11) ☐ The oath or declaration is objected to by the	e Examiner. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for fore a)⊠ All b)□ Some * c)□ None of:	eign priority under 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority docum					
2. Certified copies of the priority docum	•	·			
<ol> <li>Copies of the certified copies of the application from the International Bu</li> </ol>	•	received in this National Stage			
* See the attached detailed Office action for a		received			
,					
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		ummary (PTO-413) )/Mail Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/7/2006.	5) Notice of In 6) Other:	formal Patent Application			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

A. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristensson (5,167,577) in view of German patent (DE 2608792 A).

Kristensson teaches:

Claim 1: Air supply device (9) for obtaining zones of clean air in premises, said air supply device comprising at least one air permeable body (9) including at least one inner and at least one outer part (13, 16) of which the inner part (13) consists of or includes porous material (col.2 II.50-55), at least one fan device (8a) is provided to bring air (15) (col.2 II.41-49), which is to be supplied to the premises (2), to flow through the air permeable body at low air velocity at least one device (8c) is provided to see to that the air (15) supplied to the premises (2) has a lower temperature than the air in said premises (2) (col.2II.18-19 and col.2 II.38-40), the air permeable body, in cross section, has the shape of parts of a circle or substantially a circle or primarily parts of a circle or substantially a circle or primarily parts of a circle or substantially a circle (Fig.1), and the combination that the inner part (13) consists of or includes porous material and the outer part (16) has passages (pores) and located close to each other (col.3 II.5-25), for making a turbulent zone around the clean-air zone

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more narrow so that the turbulence around the clean-air zone hereby becomes less (col.3 II.5-11 and col.3 II.26-30).

Claim 5: All or almost all passages are of equal length (having the same thickness, Fig.1).

Claim 6: The passages are defined by tubes (cellular pores, col.3 ll.5-11) which are located close to each other and connected to each other.

Claim 7: The tubes are made of a plastic material (col.3 II.5-11).

Claim 8: The tubes are made of a metallic material (col.3 II.14-18, wire is a metal).

Claim 9: The tubes are made of a ceramic material (ceramic foam is a tough, plastic-like foam made from ceramics, a plastic-like foam is taught col.3 II.5-11, http://en.wikipedia.org/wiki/Ceramic foam).

Claim 10: The tubes are interconnected by fusing (the process of coating with the PVC material is fusing, col.3 II.5-11).

Claim 11: The porous material of the inner part (13) is designed to permit filtration of air flowing through said porous material in order to obtain a low content of particles in the premises (filter material, col.3 II.5-11).

Claim 12: The porous material of the inner part consists of foamed plastic with open cells (col.3 II.5-11).

Claim 14: The outer part (16) consists of a heat resistant material (col.3 II.19-24).

Claim 15: The inner and outer parts (13, 16) are connected to each other (Fig.1).

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Claim 16: The body is in cross section shaped as a semicircle or substantially as a semicircle (Fig.1).

Claim 17: The air permeable body is in cross section shaped as a quarter of a circle or substantially as a quarter of a circle (Fig.1).

Claim 18: The air permeable body is shaped as a spherical segment or as a substantially spherical segment (Fig.1).

Claim 19: The device which is provided to see to that the air (15) supplied to the premises (2) has a lower temperature than the air in said premises (2), is provided to supply air at such temperature that said air descends to a low level in the premises (2) (col.2 II.18-19 and col.2 II.38-40).

Claim 20: Impure air is gathered in an upper zone (8) closest to the ceiling of the premises (2) (Fig.7), at least one air outlet (7) for impure air is provided at the ceiling (1) of the premises (2), and characterized in that the air permeable body (9) is located beneath the upper zone (8) such that substantially no impure air is coejected out of the upper zone (8) by the air streams (15) discharged by the air permeable body (9) (Fig.7) (col.2 II.13-40).

Claim 21: The air permeable body (9) is located above a door (in ceiling) to the premises (2) and it is elongated and extends along at least a part of the width of the door (expanding entire room, Fig.7).

Claim 22: The device (8a) which is provided to see to that the air (15) supplied to the premises (2) has a lower temperature than the air in said premises (2), is a device

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for taking in cool air and/or includes a cooling device or is a cooling device (8c) for cooling air (col.2 II.14-19).

Kristensson discloses the invention above, however Kristensson possibly does not teach rectilinear uniform in thickness tubes that are at least four times greater in length than width with an outer part thicker than the inner part.

The German Patent teaches (please refer to English translation for correlating lines):

Claim 1. Tubes (3) which are substantially rectilinear, substantially uniform in thickness (Description, II.18-19), said passages (3) further having a length which is at least four times greater than their width in order to generate rectilinear and uniformly distributed partial air streams (Fig.1).

Claim 2. The length of each passage (3) is 4-10 times greater than their width (Fig.1).

Claim 3. The length of each passage (3) is 4-10 times greater than their width (Fig.1).

Claim 4. The passages (3) have a circular or substantially circular (honeycomb shaped) cross section (Description, II.18-19), and that they have the same or substantially the same diameter along their entire length (Fig.1).

Claim 13: The outer part (3) is thicker than the inner part (2) (Fig.1).

Therefore it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the air system of Kristensson in

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view of the teaching of the German Patent in order to reduce the exhaust velocity (German patent, II.18-22).

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As listed on PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272 9967. The examiner can normally be reached on Monday - Thursday 9:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Rinehart can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller

Examiner Art Unit 3749

5/25/2007

KENNETH RINEHART

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